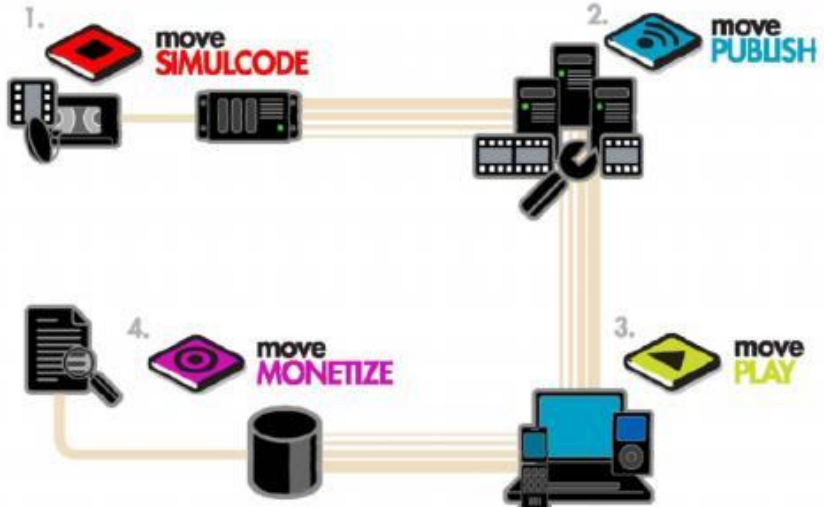


**U.S. Patent No. 11,677,798 Claim 1**

The following claim chart shows exemplary aspects of certain streaming services and products provided by MOVE Networks, Inc. (“MOVE”) that practice the limitations of claim 1 of the ’798 Patent. The chart is exemplary and should not be read to limit MOVE’s practicing of the below-listed claim or any claim with respect to the services or products described below, including MOVE’s Move Media Player (“Media Player”). Nor should this chart be read to limit the claims practiced by MOVE. Additionally, this chart should not be read to limit the acts that infringe the below claim.

| Claim Element                                                                                                                                               | Example Infringement Evidence                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
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| [1.pre] A system for adaptive-rate content streaming of digital content playable on one or more end user stations over the Internet, the system comprising: | <p>MOVE’s Media Player operated within a system that operates on an end user’s content player device (“End User Device”) to stream live and on-demand video over a network from a server for playback of the video.</p> <p>Any images in this chart are from MOVE’s “Technical Overview of Move Networks Implementation,” labeled as EX2012.</p> <p>For example, “Move Networks provides and operates the premier video distribution platform.” EX2012, at 4. “The architecture of the move platform enables a revolutionary viewing experience giving viewers control over how they watch and interact with the video content. Move Networks manages the systems in the platform to provide an end-to-end broadband solution on behalf of video publishers and broadcasters.” <i>Id.</i> For example, “Move Networks provides and operates the premier video distribution platform” that “delivers pre-recorded (VOD) video content or live broadcasts over the Internet.” <i>Id.</i> at 6.</p> <p>A high-level diagram of the Move platform is shown below:</p> |

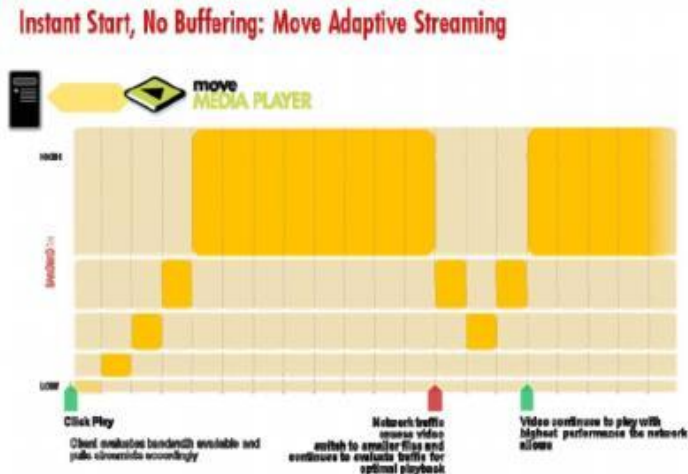
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| Claim Element                                              | Example Infringement Evidence                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                            |  <p><i>Id.</i> at 6.</p> <p>Thus, MOVE provided a content player device to stream a video over a network from a server for playback of the video.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| [1.1] at least one storage device storing digital content, | <p>MOVE’s “platform supports a broadcast publishing process that includes the video source acquisition, encoding and preparing the video for transmission, the storage and distribution of video content, [and] client viewing of the video content.” EX2012 at 6. The MOVE system “provide[s] a self-optimizing, variable bitrate viewing experience.” <i>Id.</i> at 10. More specifically, “a smooth end user experience” is provided “as the Move Media Player up-shifts and down-shifts in response to network and client CPU ability ... to provide a consistency of service at different bitrates.” <i>Id.</i> at 12. <i>See also id.</i> at 17-18 (discussing server specifications), 21-22 (discussing video storage and distribution).</p> |

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| Claim Element                                                                                                                                                                                     | Example Infringement Evidence                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                   | Thus, MOVE's system included at least one storage device storing digital content.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| [1.2] the digital content encoded at a plurality of different bit rates creating a plurality of streams including a first bit rate stream, a second bit rate stream, and a third bit rate stream, | <p>In MOVE's system, the live or on-demand video was encoded using Move Simulcode, which included "[t]he process of atomizing and encoding video for transmission. The first step in this process of preparing video for transmission decompose[d] the captured video content into small streamlets for encoding and transmission .... The process of Simulcoding refers to the process of producing media that matches multiple viewing profiles (based on device and performance profiles) in a single process." EX2012 at 10.</p> <p>Further, each of the different bitrate/quality streams are stored on and accessed by the server as groups or sets of streamlets/files that correspond to portions of the video, and each group is encoded at the same respective one of the different bitrates. <i>See, e.g.</i>, EX2012; 2011. For example, "Live content streamlets are encoded ... to provide a self-optimizing, variable bitrate viewing experience." EX2012 at 10. The figure below provides an overview of this aspect of the Move System.</p> <div data-bbox="751 781 1541 954" data-label="Diagram"> </div> <p><i>Id.</i> at 11.</p> <p>More specifically as to the different viewing profiles and bitrates, "Move Networks encode[d] to either high definition (16x9) or standard definition (3x4) aspect ratios, using one of the following 'best practice' profile sets, based on an aspect ratio (16x9) frames-per-second. Profiles up to 2.4 Mbps are used for video streams intended for distribution over high-bandwidth networks. The low-end profiles include a 'thumbnail' profile (Stream Type = T), which is used in multi-player mosaic Web pages, and an 'emergency profile (Stream Type = E) which provides a minimal experience for poor connectivity or low-bandwidth connections. The remaining profiles are 'normal' and are situated at bit rates that offer a smooth end user experience as the Move Media Player up-shifts and down-shifts in response to the network and CPU availability." <i>Id.</i> at 19.</p> |

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| Claim Element                                                                                                                                                                                               | Example Infringement Evidence                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
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|                                                                                                                                                                                                             | Thus, MOVE practiced encoding digital content at a plurality of different bitrates to create a plurality of streams including a first bit rate stream, a second bit rate stream, and a third bit rate stream.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| [1.3] wherein the first bit rate stream, the second bit rate stream, and the third bit rate stream each comprise a group of streamlets encoded at a respective one of the plurality of different bit rates, | <p>Similarly, the streamlets across the groups include a time index, are time aligned, and corresponding streamlets across the groups have equal durations. <i>See e.g.</i>, EX2012; EX2011. For example, “Move Networks provides an integrated Content Management System (CMS) for entering the metadata associated with video programming, such as titles, descriptions, topics, program thumbnails, and time offsets (beginning and end points of a video segment). Time offsets can also be automatically detected in some cases based on time indexes and sudden changes in video keyframes.” EX2012 at 25. Further, the figure below provides an exemplary illustration of the duration and alignment of streamlets/files of varying bitrates in the Move system.</p>  <p><i>Id.</i> at 24.</p> |

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| Claim Element                                                                                                                                                    | Example Infringement Evidence                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
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|                                                                                                                                                                  | <p>Thus, the various bit rate streams of MOVE's system included at least the first bit rate stream, the second bit rate stream, and the third bit rate stream, wherein each comprised a group of streamlets encoded at a respective one of the plurality of different bit rates.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <p>[1.4] each group of streamlets comprising at least first and second streamlets, each of the streamlets corresponding to a portion of the digital content;</p> | <p>As explained above, the streamlets across the groups include a time index, are time aligned, and corresponding streamlets across the groups have equal durations. <i>See e.g.</i>, EX2012; EX2011 at 3-4 (“as long as the cousin streamlets (at other encode rates) also aligned with the start and end points,” it is possible to make on-the-fly substitutions between streamlets that cover the same time space in the content). For example, “Move Networks provides an integrated Content Management System (CMS) for entering the metadata associated with video programming, such as titles, descriptions, topics, program thumbnails, and time offsets (beginning and end points of a video segment). Time offsets can also be automatically detected in some cases based on time indexes and sudden changes in video keyframes.” EX2012 at 25. Further, the figure below provides an exemplary illustration of the duration and alignment of streamlets/files of varying bitrates in the Move system.</p> <div data-bbox="787 771 1470 1250"> <p>The diagram illustrates the Move Adaptive Streaming process. It shows a timeline with three horizontal bars representing different bitrates: HIGHEST (top, yellow), MEDIUM (middle, light yellow), and LOW (bottom, light yellow). A 'Click Play' event is shown at the start of the timeline. The HIGHEST bitrate bar starts at the 'Click Play' event and continues for a duration. The MEDIUM and LOW bitrate bars start at the 'Click Play' event and continue for a duration. The diagram shows that the video can start playing immediately without buffering, and the system can adaptively switch between bitrates based on network conditions.</p> </div> <p><i>Id.</i> at 24.</p> |

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| Claim Element                                                                                                                                                                                                                                         | Example Infringement Evidence                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>[1.5] wherein at least one of the first bit rate stream, the second bit rate stream, and the third bit rate stream is encoded at a bit rate of no less than 600 kbps; and</p>                                                                      | <p>As explained above, “Move Networks encode[d] to either high definition (16x9) or standard definition (3x4) aspect ratios, using one of the following ‘best practice’ profile sets, based on an aspect ratio (16x9) frames-per-second. Profiles up to 2.4 Mbps are used for video streams intended for distribution over high-bandwidth networks. The low-end profiles include a ‘thumbnail’ profile (Stream Type = T), which is used in multi-player mosaic Web pages, and an ‘emergency profile (Stream Type = E) which provides a minimal experience for poor connectivity or low-bandwidth connections. The remaining profiles are ‘normal’ and are situated at bit rates that offer a smooth end user experience as the Move Media Player up-shifts and down-shifts in response to the network and CPU availability.” EX2012 at 19.</p> <p>Thus, MOVE practiced at least one of the first bit rate stream, second bit rate stream, and third bit rate stream being encoded at a bit rate of no less than 600 kbps.</p> |
| <p>[1.6] wherein the first streamlet of each of the groups of streamlets has the same first duration and encodes the same first temporal portion of the digital content in each of the first bit rate stream, the second bit rate stream, and the</p> | <p>As discussed above, the streamlets across the groups include a time index, are time aligned, and corresponding streamlets across the groups have equal durations. <i>See e.g.</i>, EX2012; EX2011. For example, “Move Networks provides an integrated Content Management System (CMS) for entering the metadata associated with video programming, such as titles, descriptions, topics, program thumbnails, and time offsets (beginning and end points of a video segment). Time offsets can also be automatically detected in some cases based on time indexes and sudden changes in video keyframes.” EX2012 at 25. Further, the figure below provides an exemplary illustration of the duration and alignment of streamlets/files of varying bitrates in the Move system.</p>                                                                                                                                                                                                                                          |

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| Claim Element                                                                                          | Example Infringement Evidence                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| third bit rate stream, and                                                                             | <p data-bbox="800 331 1293 363"><b>Instant Start, No Buffering: Move Adaptive Streaming</b></p>  <p data-bbox="516 862 617 889"><i>Id.</i> at 24.</p> <p data-bbox="516 1008 1772 1101">Thus, the first streamlet of each of the various bit rate streams of MOVE's system had the same first duration and encoded the same first temporal portion of the digital content in each of the first bit rate stream, the second bit rate stream, and the third bit rate stream .</p>                                                                                                                                                                                                                                                   |
| [1.7] wherein the first streamlet of the first bit rate stream encodes the same first temporal portion | <p data-bbox="516 1133 1793 1349">As discussed above, the streamlets across the groups include a time index, are time aligned, and corresponding streamlets across the groups have equal durations. <i>See e.g.</i>, EX2012; EX2011. For example, "Move Networks provides an integrated Content Management System (CMS) for entering the metadata associated with video programming, such as titles, descriptions, topics, program thumbnails, and time offsets (beginning and end points of a video segment). Time offsets can also be automatically detected in some cases based on time indexes and sudden changes in video keyframes." EX2012 at 25. Further, the figure below provides an exemplary illustration of the duration and alignment of streamlets/files of varying bitrates in the Move system.</p> |

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| Claim Element                                                                                                                                                      | Example Infringement Evidence                                                                                                                                                                                                                                                                                                 |
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| <p>of the digital content at a different bit rate than the first streamlet of the second bit rate stream and the first streamlet of the third bit rate stream.</p> | <div data-bbox="514 349 1228 836"> </div> <p><i>Id.</i> at 24.</p> <p>Thus, the first streamlet of each of the various bit rate streams of MOVE's system encodes the same first temporal portion of the digital content in each of the first bit rate stream, the second bit rate stream, and the third bit rate stream .</p> |